

individual components from the carousel [component storage member] and assembling the unloaded components into the data storage device[; and positioning means for sequentially aligning components for assembly by the assembly means].

2. The apparatus of claim 1 wherein the [component storage member] carousel supports a plurality of stacks of components at spaced locations arranged about a center point and the apparatus comprises:

[a rotatable base having a rotation axis and adapted to support the component storage member so that the center point of the component storage member is coaxial with the rotation axis of the base; and]  
[means for incrementally rotating the] a motor coupled to the carousel base to sequentially positioning each stack of components for assembly.

3. The apparatus of claim 2 [farther] further comprising a vacuum source, operably coupled to the rotatable carousel base, [for supplying] to supply a vacuum to removably secure [a component storage member] the carousel to the rotatable carousel base.

4. The apparatus of claim 2 further comprising [means for incrementally aligning] an indexer coupled to the carousel base to align individual components from a stack of components relative to the assembly [means] arm.

5. The apparatus of claim 2 and including a carousel coupled to the carousel base having a center point and [wherein] individual components in a component stack are supported in an elongated container and the [component storage member] carousel includes [means for] a latch assembly to removably [securing] secure a plurality of containers at spaced locations about the

center point of the [component storage member] carousel aligned with [the] a rotation axis of the carousel base.

6. The apparatus of claim 1 wherein the apparatus includes a plurality of [support means] carousel bases rotationally coupled to the frame [for supporting] to support multiple component [storage members] carousels and the assembly arm being operable [including means for operating the assembly means] between the multiple component carousels [storage members the means operating the assembly means] to unload the carousels [a component storage member] and operable to detect [detecting] when one of the component [storage member] carousels is empty and shift [shifting] the assembly [means] arm to [an alternate component storage member for operation] another carousel.

7. The apparatus of claim 1 wherein the component [storage member] carousel is adapted to [house] support discs for assembly in a spindle motor of a data storage device.

8. The apparatus of claim 7 wherein the component [storage member] carousel includes [means for removably coupling] a plurality of spaced latch assemblies about a circumference of the carousel and adapted to removably connect a plurality of disc containers storing a plurality of stacked discs to the [component storage member] carousel at concentric spaced locations.

9. The apparatus of claim 8 wherein the disc containers include covers and the apparatus includes [means for removing] a cover detacher to detach the disc container covers prior to assembling discs [housed in] from the disc container.

10.27 The apparatus of claim 1 wherein the component [storage member] carousel is adapted to [house] support spacers for assembly in a spindle motor of a data storage device.

11. The apparatus of claim 1 wherein the apparatus is adapted to assembly components of a disc stack supported by a spindle motor and further comprising:

a plurality of carousel bases including a carousel base adapted to support [support members coupled to the frame, one of the support members adapted to removably support] a component carousel [storage member] for discs and [another of the support members being adapted to support] a carousel base adapted to support a component [storage member] carousel for spacers;

a plurality of assembly [members, one of the assembly members being] arms including an assembly arm coupled to the [component storage member] carousel base supporting discs for assembling discs and [another of the] an assembly [members being] arm coupled to the [component storage member] carousel base supporting spacers for assembling spacers;  
and

[means for coordinating] a controller coupled to the assembly arm to coordinate [coordinating] operation of the plurality of assembly [members] arms to alternately [assembly] assemble discs and spacers.

12. The apparatus of claim 11 wherein the component [storage member] carousel for the discs includes a [storage] frame including [means for removably coupling] a plurality of circumferentially spaced latch assemblies to removably couple a plurality of disc containers to the carousel [storage frame arranged about a center point and wherein each support members includes a support base rotationally coupled to the frame for supporting the component storage member for rotation about the center point for selectively positioning disc containers relative to the assembly means for assembly of discs].

13. The apparatus of claim 12 wherein the disc containers [houses] house a disc stack including a plurality of coaxially aligned discs [aligned along a disc stack axis] and further comprises [means for incrementally moving] an indexer to incrementally position the [support] carousel base adapted to support the carousel for discs for sequentially positioning [the disc container] one of the plurality of disc containers to unload individual discs in [a] the disc stack.

14. The apparatus of claim 11 wherein the component carousel [storage member] for spacers includes a base including a plurality of spacer posts arranged about a center point and sized to support a plurality of stacked spacers and [each support members includes a support base rotationally coupled to the frame for supporting the base of the spacer component storage member for rotation about the center point] and including [means for rotating the component storage member for aligning] a motor coupled to the carousel base adapted to support the carousel for spacers to align sequential posts for assembly.

15. The apparatus of claim 14 further comprising [elevator means] an index rod operably coupled to the component [storage member] carousel for spacers [for moving] to push spacers toward an extended end of posts for assembly.

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Please add new claim 21.

--21.7 An assembly apparatus comprising:  
Sub B 3 assembly arms operably between a component load position and  
a component install position; and  
A3 means for storing a plurality of components for assembly by  
the assembly arms. --

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